IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	James M. Schreder
Serial No.:	10/729,774
For:	INTERACTIVE INSTRUCTIONS IN SEQUENTIAL CONTROL MODULES IN CONTROLLERS
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DECLARATION UNDER RULE 132 OF JAMES M. SCHREDER

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Commissioner for Patents
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Sir:

1. I am the inventor of the above-identified patent application.

2. I have a BSEE degree in Electrical Engineering from Penn State University (received in 1985) and an MSCE degree in Computer Engineering from Syracuse University (1988). I have worked in the field of control systems for processes since 1989. I have been employed at Honeywell, Inc. from 1989 to the present. During this time, I have worked on the design and development of process control systems. My current title is Systems Engineer for Supervisory Control platforms.

3. I have read the Office Action dated May 25, 2006, hereinafter referred to as the Office Action, U.S. Patent 5, 881,115 to Lipner, hereinafter referred to as Lipner and the amended claims set forth in the Amendment Accompanying Request for Continued Examination submitted concurrently herewith..

4. The control system of the present invention comprises an operator station 800 or 802 and a controller R-C200 or R-FIMS as shown in Fig. 8. The operator station comprises an interface component that provides to an operator a display screen having a table view of a procedure of a computer controlled process that permits the operator to select a step of the procedure and to view the outputs of the selected step, wherein the outputs comprise a combination of interactive instruction and automatic expression. The ability to view all of the outputs of a step, whether manual or automatic, is a user friendly feature and very advantageous as it eliminates a need for the operator to switch among several views to achieve interactive control. This feature also allows the flexibility of combining automatic expression with manual instructions into a single procedure with a single table view for operator control and viewing of both the automatic expression and the interactive instructions. The procedures, including the instructions, are executed by controller R-C200.

5. Lipner discloses a control system having a distributed process control unit 5 and a Supervisory Sequential Controller Interface (SSCI) 15. SSCI 15 is designed to provide an interface, which allows for both user-paced (manual) and system-paced (automatic) procedure and sequence monitoring. That is, Lipner's procedures and their respective steps are either automatic or manual, but not a combination of both. This is in contrast to the present invention's single procedure that uses a combination of automatic expression and interactive instructions.

6. Lipner's SSCI 15 provides to an operator an executive screen 39 (Fig. 2) comprising a list of procedures 41 to scroll through and to select one or more procedures to be started (column 4, lines 8 and 9).

7. Lipner uses a relational database to generate equations representing the sequential steps of a procedure, which can be automatically or manually executed (column 2, lines19-21). Lipner's SSCI 15 also provides to the operator a procedure screen 47 (Fig. 3) of a selected procedure. Procedure screen 47 includes mode selection buttons 51 for the operator to select a mode of a procedure. These modes are described (column 5, lines 7-10) and shown in Fig. 3 as "manual", "auto" and command advisor". There is no button for a combination of both manual and auto. Therefore, Lipner does not give the operator any ability to select a view that has a combination of manual steps and automatic steps of a procedure. In fact, Lipner's steps of a procedure are executed either automatically or manually based on the operator's use of buttons 51 to select the automatic or the manual mode for the procedure. Lipner does not mention any mode that has a combination of automatic and manual instructions.

8. Lipner at column 2, lines 29-34, and column 4, lines 19-22, refers to a violated mode. When operating in an automatic mode, if a condition is not satisfied by a step, "the automatic sequencing will terminate requiring operator intervention" (column 2, lines 33 and 34) and "the procedure will transfer to a 'violated mode' which requires operator action" (column 4, lines 22 and 23). There is no further showing in a figure or description in columns 2 or 4 or elsewhere in Lipner of the violated mode, what operator action or intervention is required or how presented to the operator. There is no mention that an automatic display view is then populated with manual instructions. Indeed, the mechanism of buttons 51 disclosed by Lipner in Fig. 3 would in all likelihood be

used to switch to a manual mode that then presents manual instructions of the step in question.

9. Lipner's program 32 in work station 19 of SSCI 15 executes the instructions of the steps shown on the display screen 47 and provides control signals as a result of the execution that are provided to distributed control processor 5 to control the process.

10. Lipner's column 4, line 64 to column 5, line 2, passage describes a simultaneous display in separate windows of multiple procedures that are being executed at the same time. Each window will have a separate procedure that is in either a manual mode or an automatic mode based on the operator's selection of mode buttons 51. None of the displayed procedures would have a table view of the outputs of a selected step of a procedure that include a combination of an automatic expression and an interactive instruction.

11. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Subscribed this 26th day of September, 2006.

James M. Schreder